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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/736,845	•	12/17/2003	Young-Min Yoon	1349.1339	5420	
21171	7590	07/18/2005		EXAM	EXAMINER	
STAAS & HALSEY LLP				LORENCE, RICHARD M		
SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			ART UNIT .	PAPER NUMBER		
				3681		
				DATE MAILED: 07/18/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/736,845	YOON ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Richard M. Lorence	3681			
Period fo	The MAILING DATE of this communication apor Reply	opears on the cover sheet with the c	orrespondence address			
A SH THE - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a report of period for reply is specified above, the maximum statutory period reto reply within the set or extended period for reply will, by stature to reply within the set or extended period for reply will, by stature to reply within the set or extended period for reply will, by stature to reply will and the mailing term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timply within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
Status						
·	Responsive to communication(s) filed on <u>07 June 2005</u> .  This action is <b>FINAL</b> . 2b) This action is non-final.  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withdree Claim(s) is/are allowed. Claim(s) 1-14 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/	awn from consideration.				
Applicati	ion Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on <u>07 June 2005</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (	ınder 35 U.S.C. § 119					
a)	Acknowledgment is made of a claim for foreig  All b) Some * c) None of:  1. Certified copies of the priority documer  2. Certified copies of the priority documer  3. Copies of the certified copies of the pri application from the International Burea  See the attached detailed Office action for a list	nts have been received. nts have been received in Applicationity documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage			
2) Notice	t(s) le of References Cited (PTO-892) le of Draftsperson's Patent Drawing Review (PTO-948) le of Draftsperson's Patent Drawing Review (PTO-948) le of Draftsperson's Patent (s) (PTO-1449 or PTO/SB/08 le r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da  5) Notice of Informal P  6) Other:	(PTO-413) Ite atent Application (PTO-152)			

#### **DETAILED ACTION**

This action is in response to the amendment filed on June 7, 2005. The specification and claim 6 have been amended. Claims 1-14 remain pending.

### Drawings

The replacement drawing sheets containing Figures 2 and 3 were received on June 7, 2005. These drawings are acceptable.

### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namiki et al. '381 in view of Ide '813 and Nishimura '545. The '381 patent to Namiki et al. discloses clutch apparatus in Figure 10 including the object 102 installed on shaft 103, clutch housing 108, driving gear 105, clutch 107, solenoid 109 with switch member 110, and initial position controlling protuberance 108a. Namiki et al. does not show the pair of phase protuberances. Ide et al. '813 discloses a similar device for controlling the position of the object 10 (equivalent to Namiki's object 102) wherein in addition to the initial position protuberance 154, a pair of phase protuberances 153, 154 are provided on the housing of the clutch 152. Ide et al. suggest that such an arrangement permits the feed roller and aligning roller to be controlled by a single solenoid leading to a

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desirable reduction in cost and weight (column 15, lines 58-64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Namiki et al. with a pair of phase protuberances in view of the teaching of Ide et al. Neither Namiki et al. or Ide et al. show the solenoid supporting the clutch housing. Nishimura et al. '545 discloses a similar electromagnetically controlled spring clutch mechanism wherein the solenoid unit including the supporting member 42 and electromagnetic coil 62 support the housing 36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the clutch of Namiki et al. as modified by Ide et al. in the manner shown in Nishimura in view of the suggestion of Nishimura that such an arrangement results in a more compact and easily installed electromagnetically controlled spring clutch mechanism.

## Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is (571) 272-7094. The examiner can normally be reached on Mondays through Fridays from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Primary Examiner Art Unit 3681

Lorence/rml